Amendments to the Specification

1. (currently amended) A compound represented by <u>a formula + below or a pharmaceutically acceptable salt or a prodrug derivative</u>-thereof:

wherein;

R and R' are independently C₁-C₅ alkyl, C₄-C₅-fluoroalkyl, or together R and R' form-a substituted or unsubstituted, saturated or unsaturated carbocyclic ring having from 3 to 8 carbon atoms;

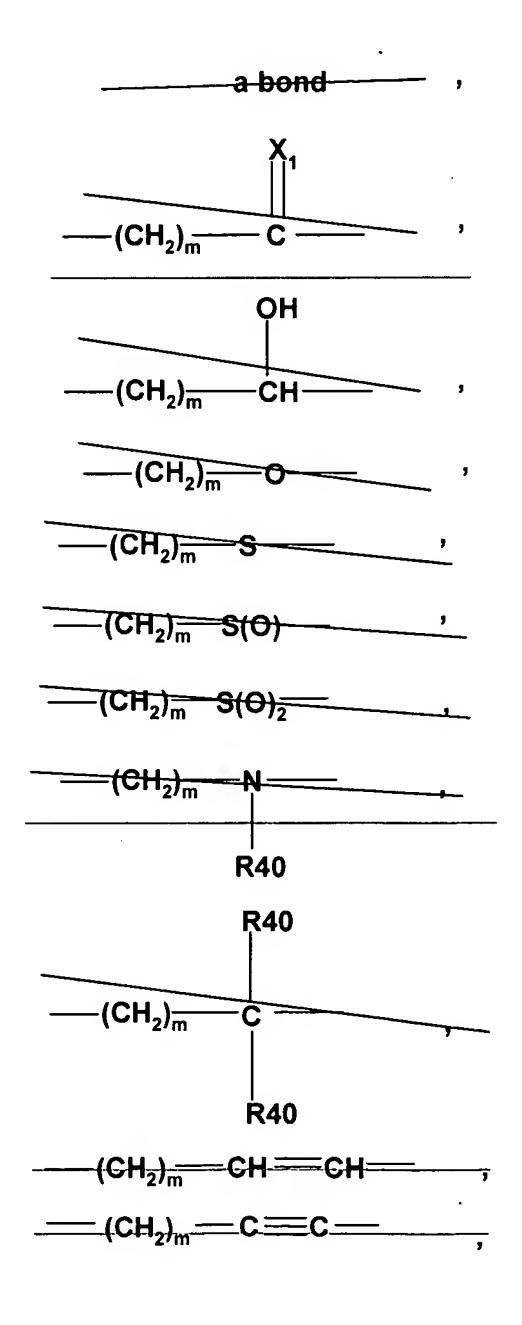
Rept is hydrogen or methyl;

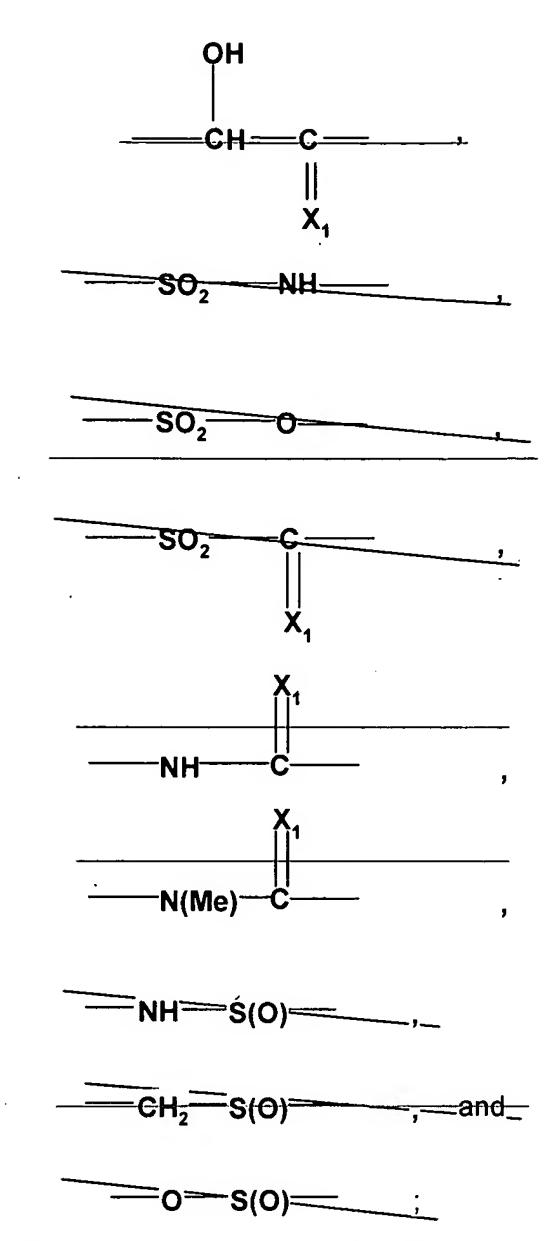
R1 and R2 are independently selected from the group consisting of hydrogen or, halo, C1-C5 alkyl; C1-C5 fluoroalkyl, O-C1-C5 alkyl, S-C1-C5 alkyl, O-C1-C5 fluoroalkyl, C2-C5 alkenyl, C3-C5 cycloalkyl, and C3-C5 cycloalkyl;

L₁ is a divalent linking group selected from: a bond. —
$$(CH_2)_m$$
 — C — ,

— $(CH_2)_m$ —

and L3 are divalent-linking groups independently-selected from the group-consisting of





where m is 0, 1 or 2, X_{+} is oxygen or sulfur, and each R40 is independently hydrogen, C_1 - C_5 alkyl, or C_1 - C_5 fluoroalkyl;

R_{BOH} is

3-methyl-3-hydroxypentyl,
3-methyl-3-hydroxypentenyl,
3-methyl-3-hydroxypentynyl,
3-ethyl-3-hydroxypentyl,
3-ethyl-3-hydroxypentenyl,
3-ethyl-3-hydroxypentynyl,

```
3-ethyl-3-hydroxy-4-methylpentyl,
3-ethyl-3-hydroxy-4-methylpentenyl,
3-ethyl-3-hydroxy-4-methylpentynyl,
3-propyl-3-hydroxypentyl,
3-propyl-3-hydroxypentenyl,
3-propyl-3-hydroxypentynyl,
1-hydroxy-2-methyl-1-(methylethyl)propyl,
1 hydroxycyclopentenyl,
1-hydroxycyclohexenyl,
1 hydroxycycloheptenyl,
1-hydroxycyclooctenyl,
1-hydroxycyclopropyl,
1-hydroxycyclobutyl,
1-hydroxycyclopentyl, or
1-hydroxycyclohexyl:
1-hydroxycycloheptyl, or
1-hydroxyeyelooctyl;
```

provided, however, that when

R_{BOH} is

```
3-methyl-3-hydroxypentyl,
3-methyl-3-hydroxypentenyl,
3-methyl-3-hydroxypentynyl,
3-ethyl-3-hydroxypentenyl,
3-ethyl-3-hydroxypentynyl,
3-ethyl-3-hydroxy-4-methylpentyl,
3-ethyl-3-hydroxy-4-methylpentenyl,
3-ethyl-3-hydroxy-4-methylpentynyl,
3-propyl-3-hydroxypentyl,
3-propyl-3-hydroxypentyl,
3-propyl-3-hydroxypentynyl, or
1-hydroxy-2-methyl-1-(methylethyl)propyl;
```

then L₁ and L₂ combine as a bond; and

R_C is

-CO2H, -CO₂Me, -CO₂Et, $-C(O)CH_2S(O)Me$. -C(O)CH₂S(O)Et. $-C(O)CH_2S(O)_2Me$. $-C(O)CH_2S(O)_2Et$ $-C(O)CH_2CH_2S(O)Me$. $-C(O)CH_2CH_2S(O)Et$ $-C(O)CH_2CH_2S(O)_2Me$ $-C(O)CH_2CH_2S(O)_2Et$ -C(O)CHMeCH₂CO₂H -C(O)C(O)OH $-C(O)C(O)NH_{2}$ -C(O)C(O)NHMe, $-C(O)C(O)NMe_2$ $-C(O)NH_2$. $C(O)NMe_2$, -C(O)NHS(O)Me-C(O)NHSO₂Me, -C(O)-NH-5-tetrazolyl, -C(O)NMe-5-tetrazolyl, -C(O)NHS(O)Me, -C(O)NHS(O)Et. $-C(O)NHSO_2Me$,

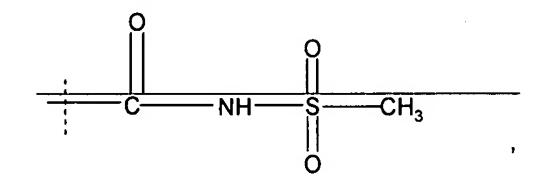
-C(O)NHSO₂Et,

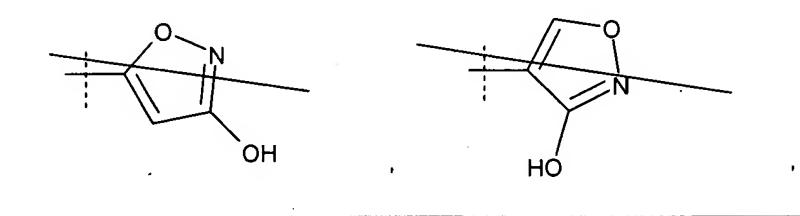
- -C(O)NHS(O)iPr,
- -C(O)NHSO2iPr,
- -C(O)NHS(O)nPr.
- -C(O)NHSO2nPr,
- -C(O)NHCH₂S(O)Me;
- -C(O)NHCH2S(O)Et,
- $-C(O)NHCH_2SO_2Me$
- -C(O)NHCH2SO2Et,
- -C(O)NHCH2CH2S(O)Me,
- -C(O)NHCH2CH2S(O)Et,
- -C(O)NHCH2CH2SO2Me,
- -C(O)NHCH2CH2SO2Et.
- -C(O)NH2,
- -C(O)NMe2;
- $-C(O)NH-CH_2-C(O)OH$,
- -C(O)NH-CH(Me)-C(O)OH,
- -C(O)NH-CH(F)-C(O)OH,
- $-C(O)NH-CH(CF_2)-C(O)OH$
- -C(O)NH-CH(OH)-C(O)OH
- -C(O)NH-CH(cyclopropyl)-C(O)OH.
- $-C(O)NH-C(Me)_2-C(O)OH$,
- $-C(O)NH-C(Me)_2-C(O)OH$
- -C(O)NH-CF(Me)-C(O)OH,
- $-C(O)NH-C(Me)(CF_3)-C(O)OH$
- -C(O)NH-C(Me)(OH)-C(O)OH,
- -C(O)NH-C(Me)(cyclopropyl-C(O)OH,
- -C(O)NMe-CH₂-C(O)OH,
- -C(O)NMe-CH(Me)-C(O)OH,
- -C(O)NMe-CH(F)-C(O)OH.
- $-C(O)NMe-CH(CF_2)-C(O)OH$
- -C(O)NMe CH(OH) C(O)OH,
- -C(O)NMe-CH(cyclopropyl)-C(O)OH,

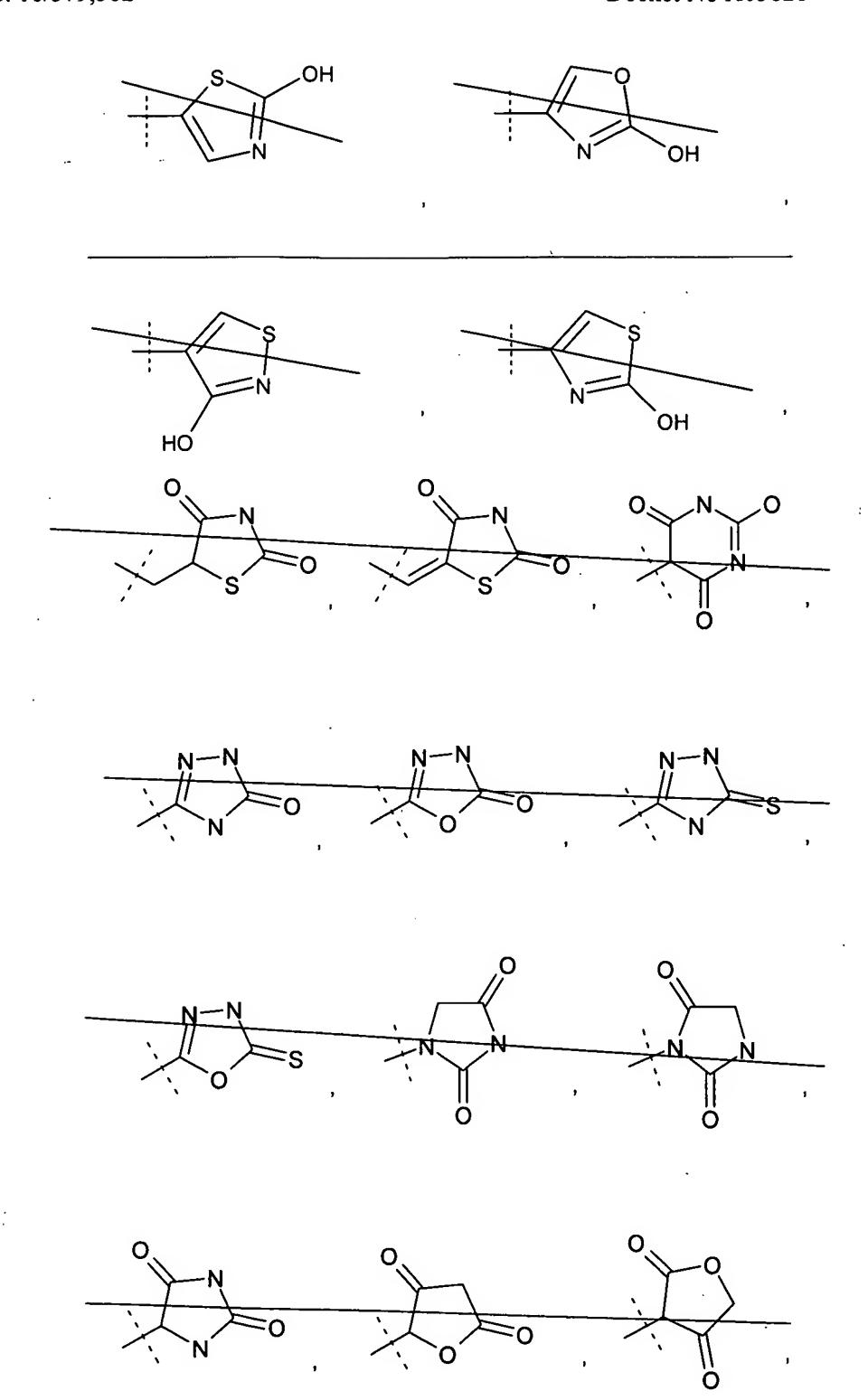
```
-C(O)NMe-C(Me)_2-C(O)OH, or
-C(O)NMe-CF(Me)-C(O)OH,
-C(O)NMe-C(Me)(CF<sub>2</sub>)-C(O)OH.
-C(O)NMe C(Me)(OH) C(O)OH,
-C(O)NMe-C(Me)(cyclopropyl)-C(O)OH,
-CH<sub>2</sub>-CO<sub>2</sub>H;
-CH<sub>2</sub>-5-tetrazolyl,
-CH<sub>2</sub>-CO<sub>2</sub>Me.
-CH<sub>2</sub>CO<sub>2</sub>Et,
-CH2NHS(O)Me,
-CH<sub>2</sub>NHS(O)Et,
-CH<sub>2</sub>NHSO<sub>2</sub>Me,
-CH2NHSO2Et,
-CH<sub>2</sub>NHS(O)iPr.
-CH<sub>2</sub>NHSO<sub>2</sub>iPr,
-CH<sub>2</sub>NHS(O)nPr,
-CH2NHSO2nPr,
-CH2NHCH2CH2SO2CH3,
-CH<sub>2</sub>NH(CH<sub>2</sub>CO<sub>2</sub>H),
-CH<sub>2</sub>N(C(O)Me)(CH<sub>2</sub>CO<sub>2</sub>H),
-CH<sub>2</sub>-N-pyrrolidin-2-one,
-CH<sub>2</sub>-(1-methylpyrrolidin 2 one 3 yl).
-CH<sub>2</sub>S(O)Me,
-CH<sub>2</sub>S(O)Et,
-CH<sub>2</sub>S(O)<sub>2</sub>Me,
-CH<sub>2</sub>S(O)<sub>2</sub>Et,
-<del>CH<sub>2</sub>S(O)iPr,</del>
-<del>CH<sub>2</sub>S(O)</del>2<sup>iPr</sup>,
-CH<sub>2</sub>S(O)nPr,
-CH<sub>2</sub>S(O)<sub>2</sub>nPr,
```

- $-CH_2CO_2H$, $CH_2C(O)NH_2$,
- -CH₂C(O)NMe₂
- $-CH_2C(\Theta)NHMe$,
- -CH₂C(O)-N-pyrrolidine,
- $-CH_2S(\Theta)_2Me$
- -CH₂S(O)Me.
- -CH(OH) CO₂H.
- -CH(OH)C(O)NH2;
- -CH(OH)C(O)NHMe;
- -CH(OH)C(O)NMe₂,
- -CH(OH)C(O)NEt2;
- -CH₂CH₂CO₂H,
- -CH₂CH₂CO₂Me,
- -CH₂CH₂CO₂Et,
- $-CH_2CH_2C(O)NH_2$
- -CH₂CH₂C(O)NHMe.
- $-CH_2CH_2C(O)NMe_2$
- -CH₂CH₂-5 tetrazolyl,
- -CH₂CH₂S(O)₂Me,
- -CH₂CH₂S(O)Me,
- -CH₂CH₂S(O)₂Et,
- -CH₂CH₂S(O) Et,
- $-CH_2CH_2S(O)iPr$,
- $\hbox{-}\hbox{CH}_2\hbox{CH}_2\hbox{S(O)}_2\hbox{iPr},$
- -CH₂CH₂S(O)nPr.
- $-CH_2CH_2S(O)_2nPr$,
- $-CH_2CH_2S(O)NH_2$
- -CH₂CH₂S(O)NHMe.
- -CH₂CH₂S(O)NMe₂,

- -CH₂CH₂S(O)₂NH₂,
- $-CH_2CH_2S(O)_2NHMe$
- $-CH_2CH_2S(O)_2NMe_2$
- -CH₂CH₂CH₂S(O)Me,
- -CH2CH2CH2S(O)Et,
- $-CH_2CH_2CH_2S(O)_2Me_{*}$
- -CH₂CH₂CH₂S(O)₂Et,
- -CH(Me)CH₂C(O)OH.
- $-C(Me)_2CH_2C(O)OH_5$
- -SO3H,
- -5-tetrazolyl,







-1.3.4 oxadiazolin 2 one 5 yl,

-imidazolidine 2,4 dione 5 yl,

-1,3 thiazolidine 2,4 dione 5 methylidene,

-isoxazol-3 ol-yl, or

-1.3.4-oxadiazolin-2-thione 5 yl.

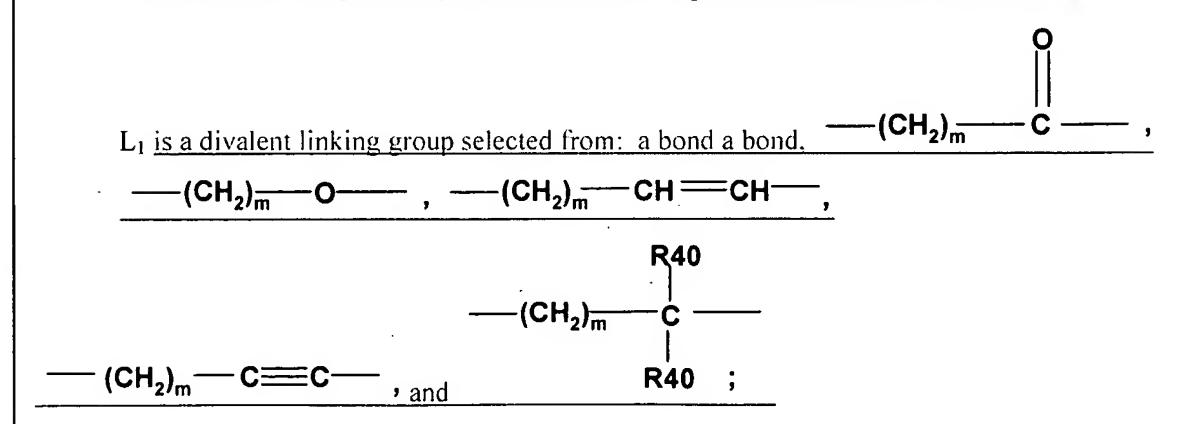
2. (canceled)

3. (currently amended) A compound represented by formula (II) or a pharmaceutically acceptable salt or an ester prodrug derivative thereof:

wherein;

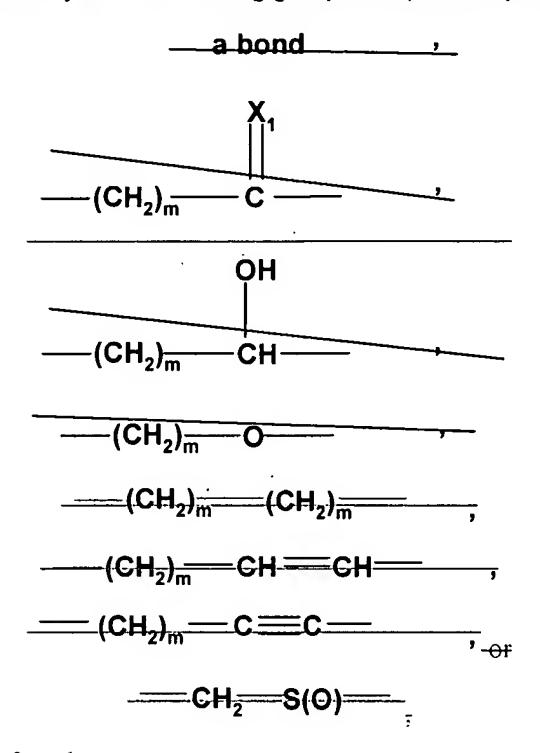
R and R' are independently methyl or ethyl;

R1 and R2 are independently hydrogen, halo, -CF3, methyl- or ethyl:, or eyclopropyl;



and L2 is a divalent linking group selected from: a bond and

and L2 are independently divalent linking groups independently selected from



where m is 0 or 1;

R_{BOH} is selected from

1-hydroxycyclopentenyl.

1-hydroxycyclohexenyl,

1-hydroxycyclopentyl, or

1-hydroxycyclohexyl, and

R_C is a group selected from

-CO₂H,

-CO₂Me,

-CO₂Et,

C(O)NH2

-C(O)NMe2-

- -C(O)NH-CH₂-C(O)OH,
- -C(O)NH-CH(Me)-C(O)OH,
- -C(O)NH-CH(F)-C(O)OH.
- -C(O)NH-CH(CF₃)-C(O)OH.
- -C(O)NH-CH(OH)-C(O)OH.
- -C(O)NH-CH(cyclopropyl)-C(O)OH,
- $-C(O)NH-C(Me)_2-C(O)OH$,
- $-C(O)NH-C(Me)_2-C(O)OH$
- -C(O)NH-CF(Me)-C(O)OH.
- $-C(O)NH-C(Me)(CF_3)-C(O)OH$
- -C(O)NH-C(Me)(OH)-C(O)OH,
- -C(O)NH-C(Me)(cyclopropyl-C(O)OH,
- -C(O)NMe-CH₂-C(O)OH,
- -C(O)NMe-CH(Me)-C(O)OH, or
- -C(O)NMe-CH(F)-C(O)OH,
- -C(O)NMe-CH(CF3)-C(O)OH,
- -C(O)NMe-CH(OH)-C(O)OH:
- -C(O)NMe-CH(cyclopropyl)-C(O)OH.
- $-C(O)NMe-C(Me)_2-C(O)OH$,
- -C(O)NMe-CF(Me)-C(O)OH.
- -C(O)NMe-C(Me)(CF₂)-C(O)OH.
- -C(O)NMe-C(Me)(OH)-C(O)OH,
- -C(O)NMe-5-tetrazolyl,
- -C(O)NMe-C(Me)(cyclopropyl)-C(O)OH, or
- -C(O) NH 5 tetrazolyl.
- 4. (currently amended) A compound represented by formula (III) or a pharmaceutically acceptable salt or an ester prodrug derivative-thereof:

wherein;

R and R' are independently methyl or ethyl; R1 and R2 are independently hydrogen. halo, CF3, methyl. or ethyl: or cyclopropyl; R_{BOH} is selected from 3-methyl-3-hydroxypentyl, 53-methyl-3-hydroxypentenyl, 3-methyl-3-hydroxypentynyl, 3-ethyl-3-hydroxypentyl, 3-ethyl-3-hydroxypentenyl, 3-ethyl-3-hydroxypentynyl, 3-propyl-3-hydroxypentyl, 3-propyl-3-hydroxypentenyl, 3-propyl-3-hydroxypentynyl, 3-ethyl-3-hydroxy-4-methylpentyl, 3-ethyl-3-hydroxy-4-methylpentenyl, 3-ethyl-3-hydroxy-4-methylpentynyl, or 1-hydroxy-2-methyl-1-(methylethyl)propyl; and RC is a group selected from -CO₂Me, -CO2Et. -C(O)NH₂, $-C(O)NMe_2$ $-C(O)NH-CH_2-C(O)OH$, -C(O)NH-CH(Me)-C(O)OH, -C(O)NH-CH(F)-C(O)OH, -C(O)NH-CH(CF₂)-C(O)OH. -C(O)NH-CH(OH)-C(O)OH, -C(O)NH-CH(cyclopropyl)-C(O)OH.

 $-C(O)NH-C(Me)_2-C(O)OH$,

 $-C(O)NH-C(Me)_2-C(O)OH$,

-C(O)NH-CF(Me)-C(O)OH,

 $-C(O)NH-C(Me)(CF_3)-C(O)OH$

-C(O)NH-C(Me)(OH)-C(O)OH.

-C(O)NH-C(Me)(cyclopropyl-C(O)OH,

-C(O)NMe-CH₂-C(O)OH,

-C(O)NMe-CH(Me)-C(O)OH,

-C(O)NMe-CH(F)-C(O)OH.

-C(O)NMe-CH(CF₂)-C(O)OH,

-C(O)NMe-CH(OH)-C(O)OH,

-C(O)NMe-CH(cyclopropyl)-C(O)OH,

-C(O)NMe-C(Me)₂-C(O)OH, and

-C(O)NMe-CF(Me)-C(O)OH,

 $-C(O)NMe-C(Me)(CF_3)-C(O)OH$

-C(O)NMe-C(Me)(OH)-C(O)OH,

-C(O)NMe 5 tetrazolyl.

-C(O)NMe-C(Me)(cyclopropyl)-C(O)OH, or

-C(O)-NH-5-tetrazolyl.

5. (currently amended) The A compound represented by formula (AA-1) to (AA-33) or a pharmaceutically acceptable salt or prodrug derivative thereof:

AA-1)

AA-2)

AA-3)

AA-4)

AA-5)

AA-6)

AA-7)

AA-8)

AA-9)

AA-10)

AA-11)

AA-12)

AA-13)

AA-14)

AA-15)

AA-16)

AA-17)

AA-18)

AA-19)

AA-20)

AA-21)

AA-22)

$$HO \longrightarrow OH$$

AA-23)

AA-24)

AA-25)

AA-26)

AA-27)

AA-28)

AA-29)

AA-30)

AA-31)

AA-32)

AA-33)

6. (currently amended) The A compound represented by formula (BB-1) to (BB-33) or a pharmaceutically acceptable salt or prodrug derivative thereof:

BB-1)

BB-2)

BB-3)

BB-4)

BB-5)

BB-6)

BB-7)

BB-8)

BB-9)

BB-10)

BB-11)

BB-12)

BB-13)

BB-14)

BB-15)

BB-16)

BB-17)

BB-18)

BB-19)

BB-20)

BB-21)

BB-22)

BB-23)

BB-24)

BB-25)

BB-26)

BB-27)

BB-28)

BB-29)

BB-30)

BB-31)

BB-32)

BB-33)

7. (currently amended) The A compound represented by formula (CC-1) to (CC-44) or a pharmaceutically acceptable salt or prodrug derivative thereof:

CC-1)

CC-2)

CC-3)

Page 33 of 47

CC-4)

CC-5)

CC-6)

CC-7)

CC-8)

CC-9)

· CC-10)

CC-11)

CC-12)

CC-13)

CC-14)

CC-15)

CC-16)

CC-17)

CC-18)

CC-19)

Page 37 of 47

CC-20)

CC-21)

CC-22)

CC-23)

CC-24)

CC-25)

CC-26)

CC-27)

CC-28)

$$HO \longrightarrow OH$$

CC-29)

CC-30)

CC-31)

$$HO \longrightarrow OH$$

CC-32)

CC-33)

CC-34)

CC-35)

CC-36)

CC-37)

CC-38)

CC-39)

Page 42 of 47

CC-40)

CC-41)

CC-42)

CC-43)

Page 43 of 47

CC-44)

8. (Currently Amended) The compound according to claim 1 represented by the formula:

or a pharmaceutically acceptable salt or prodrug derivative thereof.

9. (Currently Amended) The A compound according to claim—1 represented by the formula:

or a pharmaceutically acceptable salt or prodrug-derivative thereof.

- 10. (currently amended) The prodrug derivative of the A compound according to of claim 1 wherein the a carboxylic acid group of R_C is esterified to prodrug is a methyl ester; ethyl ester; N,N-diethylglycolamido ester; or morpholinylethyl ester group.
- 11. (previously presented) The salt derivative of the compound of claim 1 wherein the salt is sodium or potassium.

12. (withdrawn) A pharmaceutical formulation comprising the compound of claim 1 together with a pharmaceutically acceptable carrier or diluent.

13-16. (canceled)

- 17. (withdrawn) A method of treating a mammal to prevent or alleviate the pathological effects of Acne, Actinic keratosis, Alopecia, Alzheimer's disease, Bone maintenance in zero gravity, Bone fracture healing, Breast cancer, Chemoprovention of Cancer, Crohn's disease, Colon cancer, Type I diabetes, Host-graft rejection, Hypercalcemia, Type II diabetes, Leukemia, Multiple sclerosis, Myelodysplastic syndrome, Insufficient sebum secretion, Osteomalacia, Osteoporosis, Insufficient dermal firmness, Insufficient dermal hydration, Psoriatic arthritis, Prostate cancer, Psoriasis, Renal osteodystrophy, Rheumatoid arthritis, Scleroderma, Skin cancer, Systemic lupus erythematosus, Skin cell damage from, Mustard vesicants, Ulcerative colitis, Vitiligo, or Wrinkles; wherein the method comprises administering a pharmaceutically effective amount of at least one compound of claim 1.
 - 18. (withdrawn) The method of claim 17 for the treatment of psoriasis.
 - 19. (withdrawn) The method of claim 17 for the treatment of osteoporosis.
 - 20-21. (canceled)
- 22. (withdrawn) A method of treating or preventing disease states mediated by the Vitamin D receptor, wherein a mammal in need thereof is administered a pharmaceutically effective amount of the compound of Claim 1.

23-28. (canceled)